SPECTRUM HEALTH Helen DeVos children's hospital

Early Introduction of Peanut and other Allergenic foods

Rates of food allergy have been on the rise and now effects up to 8-10% of children, with peanut allergy effecting 2-3% of Children. Previous recommendations (ie 2000 AAP guidelines) have favored delayed introduction of allergenic foods. This recommendation to delay the introduction of allergenic foods was largely not based on expert opinion and not on rigorous data. Despite these recommendations, the rate of food allergy has continued to climb at an alarming rate.

Recent data has drastically changed our approach to food allergy and introduction of allergenic foods in infants. In 2014, the New England Journal of Medicine published a landmark study on early peanut introduction and development of peanut allergy (the Learning Early About Peanut allergy [LEAP] Study). In infants considered to be high risk for development of peanut allergy, early and regular ingestion of peanut virtually eliminated peanut allergy compared to avoidance. Importantly, these high risk children were screened before peanut introduction. The follow up to the original LEAP study, LEAP-ON, has shown this prevention persisted over time. Finally, the most recent data from the EAT study has shown that early introduction may also be helpful in preventing peanut and egg allergy infants at regular/standard for food allergy. Because there are no current treatments for food allergy, prevention is the most effective strategy. Recently updated guidelines from the National Institute of Allergy and Infectious Disease (NIAID) sponsored expert panel advocate strongly for an early introduction approach as outlined below.

Based on the data from these and other studies, we at Helen DeVos Children's Hospital do recommend introduction of peanut as early as 4-6 months old as a supplement to breastfeeding (not as a meal replacement). After the introduction of peanut, it is reasonable to introduce other allergenic foods in addition to breastfeeding. These foods include egg, cow's milk (ie yogurt), wheat, and fish.

For infants at Regular/Standard Risk for peanut allergy (No history of food allergy or eczema)

- Recommend introducing peanut products at home without further testing or evaluation
    - Recommend peanut not be first food introduced (infant cereal is reasonable to introduce first)
    - May start as early as 4-6 months
    - Include peanuts in diet at least 3 days/week

Higher risk for peanut allergy

- High risk defined as:
    - History of allergy to another food
    - Severe eczema
    - History of food allergy in parent and/or sibling does **not** automatically qualify your child as high risk
- Recommend evaluation by Allergist prior to introduction of peanut to ensure they are not yet allergic and at HDVCH these patients are given priority referrals in hopes to prevent food allergy development

Methods of peanut introduction

- Smooth peanut butter (1 tsp) mixed with milk or with mashed/pureed fruit
    - In older infants may be spread on damp toast cut in small cubes
- Bamba Peanut Puff Snack (Manufactured by Osem: ~ two thirds of a 1-oz (25 g) bag; 21 sticks for Bamba)
    - For young infants (<7 months), softened with 20-30 mL water or milk and mixed with milk or with mashed/pureed fruit/vegetables
- Finely ground peanuts/peanut powder mixed into other foods, such as yogurt
- Whole peanut is **not recommended** for introduction as this poses a choking hazard in children <4 years of age.

Of note, studies have shown no difference in duration of breast feeding or infant growth in patients who had early introduction of foods vs patients who were exclusively breastfed.

1. Du Toit, et al. NEJM 2015; 372: 803-813.
2. Perkin, et al. NEJM 2016; 374: 1733-1743.
3. Du Toit, et al. NEJM 2016; 374: 1435-1443.
4. Togias, et al. Addendum guidelines for the prevention of peanut allergy in the United States: Report of the NIAID-sponsored expert panel. J Allergy Clin Immunology. Jan 2017; 139(1): 30-43.